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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/687,020 | 10/13/2000 | Eric C. Coad | 55202USA1A.002 | 9163 |

7590 04/30/2002

Attention: Scott R. Pribnow
Office of Intellectual Property Counsel
3M Innovative Properties Company
P. O. Box 33427
St. Paul, MN 55133-3427

EXAMINER

SHAKERI, HADI

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 3723 | |

DATE MAILED: 04/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|--|---------------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/687,020 Examiner Hadi Shakeri | COAD ET AL. Art Unit 3723 |

-- The MAILING DATE of this communication appears in the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 29 March 2002.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.
- 4) Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-32 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Disposition of Claims

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 October 2000 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The proposed drawing correction is not approved, since it would create objection to the specification, e.g., "brief description of the drawings", however the amended specification negates the drawing objection, for the machine direction is shown in Fig. 5.

Claim Rejections - 35 USC § 102

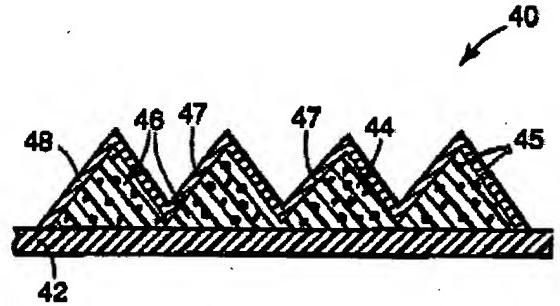
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-18 and 19-31 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Martin et al., US Patent No. 5,707,409.

Martin et al. discloses all the limitations of the claims (incorporated US Patents, 5,201,916, 4,842,937 and 4,992,082).



Claim Rejections - 35 USC § 103

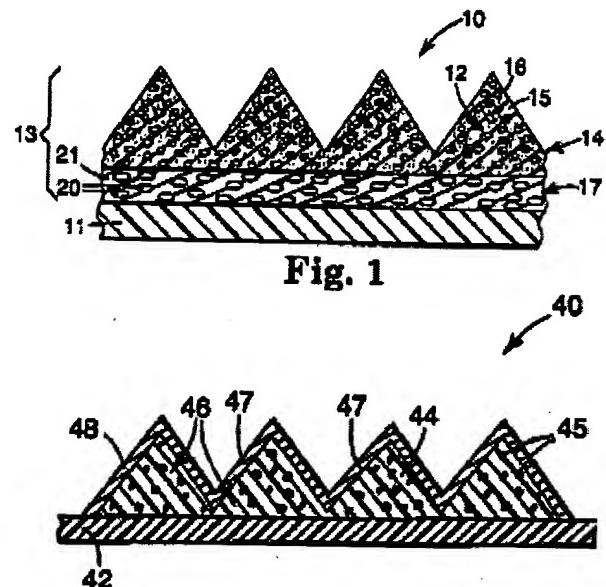
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoetzel, Patent No. 5,928,394 in view of Martin et al, US Patent No. 5707,409.

Stoetzel discloses all the limitations of claims 1 and 20, i.e., an abrasive article (10) comprising a backing (11) an abrasive coating consisting essentially of a harden binder comprising a plurality of precisely-shaped protrusions (14) (free of abrasives, col. 6, lines 14-17), except for disclosing the diamond-like carbon coating. Martin et al. teaches an abrasive article having a diamond like coating layer (48). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the article of Stoetzel with diamond-like coating as taught by Martin et al. to improve cutting performance, depending on the workpiece parameters.

Regarding claims 2-19 and 21-32, prior art meets the limitations.



Response to Arguments

4. Applicant's arguments filed March 03, 2002 have been fully considered but they are not persuasive. The assertion that consisting "essentially" means to exclude the abrasives is not persuasive because Examiner differentiates between "consisting of" and "consisting essentially of" and further in view of claims 19 and 32. However since claims 19 and 32 were rejected in error (Martin et al., col. 5, line 1) this action is not made final.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hadi Shakeri at (703) 308-6279, FAX (703) 746-3279 for unofficial documents. The examiner can normally be reached on Monday-Thursday, 7:30 AM to 6:00 PM.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist at (703) 308-1148.



Joseph J. Hail, III
Supervisory Patent Examiner
Technology Center 3700

HS



April 23, 2002